WHAT IS CLAIMED IS:

1. A hybrid vehicle that is drivable with power from an internal combustion engine and with power from a motor, said hybrid vehicle comprising:

a motoring module that motors said internal combustion engine;

a driving condition detection module that detects a driving condition of said hybrid vehicle;

a power demand specification module that specifies a driver's power demand; and

a start-time control module that, in response to input of a start command of said internal combustion engine during a run in a drive mode where operation of said internal combustion engine is at a stop and said hybrid vehicle is driven with only the power from said motor, drives and controls said motoring module to rotate said internal combustion engine at a control start revolution speed, which has been set based on the driving condition of said hybrid vehicle detected by said driving condition detection module and the power demand specified by said power demand specification module, while starting operation control of said internal combustion engine,

which includes fuel injection control and ignition control in said internal combustion engine, when a revolution speed of said internal combustion engine reaches the setting of the control start revolution speed.

2. A hybrid vehicle in accordance with claim 1, wherein said start-time control module sets the control start revolution speed to decrease with an increase in power demand specified by said power demand specification module.

3. A hybrid vehicle in accordance with claim 1, said hybrid vehicle further comprising:

an electric power-dynamic power input-output module that is connected with an output shaft of said internal combustion engine and with a drive shaft linked with an axle, and outputs at least part of the power from said internal combustion engine to said drive shaft accompanied with input and output of electric power and dynamic power,

wherein said motoring module motors said internal combustion engine by utilizing actuation of said electric power-dynamic power input-output module.

4. A hybrid vehicle in accordance with claim 3, wherein said electric power-dynamic power input-output module comprises:

a three-shaft power input-output assembly that is connected with three shafts, that is, said output shaft of said internal combustion engine, said drive shaft, and a third shaft, and specifies input and output of power from and to one residual shaft among said three shafts, based on powers input and output from and to two shafts among said three shafts; and

a generator that inputs and outputs power from and to said third shaft.

5. A hybrid vehicle in accordance with claim 3, wherein said electric power-dynamic power input-output module is a pair-rotor motor, which comprises a first rotor linked with said output shaft of said internal combustion engine and a second rotor linked with said drive shaft and outputs at least part of the power from said internal combustion engine to said drive shaft accompanied with input and output of electric power generated through an electromagnetic interaction between said first rotor and said second rotor.

6. A hybrid vehicle in accordance with claim 1, wherein said driving condition detection module detects a vehicle speed as one driving condition of said hybrid vehicle.

7. A hybrid vehicle in accordance with claim 6, wherein said start-time control module sets the control start revolution speed to decrease with an increase in vehicle speed detected by said driving condition detection module.

8. A hybrid vehicle in accordance with claim 7, wherein said start-time control module sets the control start revolution speed to decrease with an increase in power demand specified by said power demand specification module.

9. A hybrid vehicle in accordance with claim 7, said hybrid vehicle further comprising:

an electric power-dynamic power input-output module that is connected with an output shaft of said internal combustion engine and with a drive shaft linked with an

axle, and outputs at least part of the power from said internal combustion engine to said drive shaft accompanied with input and output of electric power and dynamic power,

wherein said motoring module motors said internal combustion engine by utilizing actuation of said electric power-dynamic power input-output module.

10. A hybrid vehicle in accordance with claim 9, wherein said electric power-dynamic power input-output module comprises:

a three-shaft power input-output assembly that is connected with three shafts, that is, said output shaft of said internal combustion engine, said drive shaft, and a third shaft, and specifies input and output of power from and to one residual shaft among said three shafts, based on powers input and output from and to two shafts among said three shafts; and

a generator that inputs and outputs power from and to said third shaft.

11. A hybrid vehicle in accordance with claim 9, wherein said electric power-dynamic power input-output module is a pair-rotor motor, which comprises a first rotor

linked with said output shaft of said internal combustion engine and a second rotor linked with said drive shaft and outputs at least part of the power from said internal combustion engine to said drive shaft accompanied with input and output of electric power generated through an electromagnetic interaction between said first rotor and said second rotor.

12. An internal combustion engine starting method that starts an internal combustion engine during a run of a hybrid vehicle in a specific drive mode where operation of said internal combustion engine is at a stop and said hybrid vehicle is driven with only power from a motor, said hybrid vehicle being drivable either in a drive mode with power from said internal combustion engine or in the specific drive mode with only the power from said motor and comprising a motoring module that motors said internal combustion engine, said internal combustion engine starting method comprising the steps of:

(a) detecting a driving condition of said hybrid vehicle;

(b) specifying a driver's power demand;

(c) setting a control start revolution speed, based

on the driving condition of said hybrid vehicle detected in said step (a) and the power demand specified in said step (b);

(d) driving and controlling said motoring module to rotate said internal combustion engine at the setting of the control start revolution speed; and

(e) starting operation control of said internal combustion engine, which includes fuel injection control and ignition control in said internal combustion engine, when a revolution speed of said internal combustion engine reaches the setting of the control start revolution speed.

13. An internal combustion engine starting method in accordance with claim 12, wherein said step (a) detects a vehicle speed of said hybrid vehicle, and

said step (c) sets the control start revolution speed to decrease with an increase in vehicle speed detected in said step (a) and with an increase in power demand specified in said step (b).

14. An internal combustion engine starting method that starts an internal combustion engine during a run of a hybrid vehicle in a specific drive mode where operation

of said internal combustion engine is at a stop and said hybrid vehicle is driven with only power from a motor, said hybrid vehicle comprising said internal combustion engine, an electric power-dynamic power input-output module that is connected with an output shaft of said internal combustion engine and with a drive shaft linked with an axle and outputs at least part of power from said internal combustion engine to said drive shaft accompanied with input and output of electric power and dynamic power, a motoring module that motors said internal combustion engine by utilizing actuation of said electric power-dynamic power input-output module, and said motor that outputs the power to said axle, said internal combustion engine starting method comprising the steps of:

(a) detecting a driving condition of said hybrid vehicle;

(b) specifying a driver's power demand;

(c) setting a control start revolution speed, based on the driving condition of said hybrid vehicle detected in said step (a) and the power demand specified in said step (b);

(d) driving and controlling said motoring module to rotate said internal combustion engine at the setting of

the control start revolution speed; and

(e) starting operation control of said internal combustion engine, which includes fuel injection control and ignition control in said internal combustion engine, when a revolution speed of said internal combustion engine reaches the setting of the control start revolution speed.

15. An internal combustion engine starting method in accordance with claim 14, wherein said step (a) detects a vehicle speed of said hybrid vehicle, and

said step (c) sets the control start revolution speed to decrease with an increase in vehicle speed detected in said step (a) and with an increase in power demand specified in said step (b).

16. An internal combustion engine starting method in accordance with claim 15, wherein said electric power-dynamic power input-output module comprises:

a three-shaft power input-output assembly that is connected with three shafts, that is, said output shaft of said internal combustion engine, said drive shaft, and a third shaft, and specifies input and output of power from and to one residual shaft among said three shafts, based

on powers input and output from and to two shafts among said three shafts; and

a generator that inputs and outputs power from and to said third shaft.

17. An internal combustion engine starting method in accordance with claim 15, wherein said electric power-dynamic power input-output module is a pair-rotor motor, which comprises a first rotor linked with said output shaft of said internal combustion engine and a second rotor linked with said drive shaft and outputs at least part of the power from said internal combustion engine to said drive shaft accompanied with input and output of electric power generated through an electromagnetic interaction between said first rotor and said second rotor.